

THE CLAIMS

What is claimed is:

1. A process for stabilizing an aroma-providing component against loss or degradation of desirable flavor or sensory characteristics of its aroma during storage which comprises associating the aroma-providing component with a stabilizing agent of a nucleophile that contains at least one atom having at least one lone pair of electrons, the stabilizing agent being present in an amount effective to chemically interact with undesirable compounds to form a stabilized aroma-providing component which (a) retains a significant portion of one or more of the desirable flavor or sensory characteristics of the aroma in the aroma-containing component during storage, or (b) reduces off flavor generation during storage of the aroma-providing component; and storing the stabilized aroma-providing component prior to combining it with a further component of a food, beverage, food-forming or beverage-forming material and optionally with a liquid to form a product for consumption so that the product will contain an improved or enhanced aroma compared to an unstabilized aroma-providing component.
2. The process of claim 1, wherein the stabilizing agent is a nucleophile that contains at least one atom of sulfur, nitrogen, oxygen or carbon and is present in an amount of between about 1 and 50,000 ppm.
3. The process of claim 1, wherein the stabilizing agent is SO₂, a sulfite or a substance that contains or generates a sulfite, a thiol, an amine or an amino acid, and is present in an amount of between about 1 and 20,000 ppm.
4. The process of claim 1, wherein the stabilizing agent comprises cysteine or glutathione or their salts.
5. The process of claim 1, wherein the stabilizing agent is an enzyme present in an amount sufficient to react with aldehyde groups of compounds associated with the aroma-providing component.

6. The process of claim 1, which further comprises providing an antioxidant with the stabilizing agent to help reduce or prevent oxidation of compounds that provide the desirable flavor or sensory characteristics of the aroma.

7. The process of claim 1, wherein the stabilized aroma-providing component is dried to a powder and is stored until a later time when it is reconstituted for consumption by the addition of a liquid.

8. The process of claim 1, wherein the stabilized aroma-providing component is prepared by incorporating the stabilizing agent into a material which is added to the aroma-providing component during storage.

9. The process of claim 1, which further comprises combining the stabilized aroma-providing component with a food-forming or beverage-forming component and a liquid to form a liquid food or beverage product, and drying the liquid product to obtain a solid material that retains the initial flavor or sensory characteristic of the aroma for a time period of at least six months to one year or longer during storage of the powder.

10. The process of claim 1, wherein the stabilized aroma-providing component is formed by passing the aroma-providing component through a porous membrane, film or paper material that contains the stabilizing agent.

11. The process of claim 1, wherein the stabilizing agent is a gas and the stabilized aroma-providing component is formed by passing the gas through or around the aroma-providing component to form the stabilized aroma-providing component.

12. The process of claim 1 wherein the aroma is chocolate or cocoa aroma, tea aroma, malt or Maillard reaction flavor.

13. The process of claim 1, wherein the aroma-providing component is coffee aroma and the stabilizing agent is present in an amount sufficient to react with some or all of the carbonyl groups present in compounds associated with the coffee aroma to reduce or inhibit pyrrole loss from the coffee aroma, or to reduce or inhibit degradation of thiols in the

coffee aroma, thus retaining the desirable flavor or sensory characteristics of the coffee aroma during at least six months of storage of the coffee aroma.